



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

fw

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,557	01/24/2002	Douglas Raymond Dykaar	5793	3291
23599	7590	12/27/2005	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			SELBY, GEVEL V	
		ART UNIT	PAPER NUMBER	
		2615		

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,557	DYKAAR ET AL.	
	Examiner	Art Unit	
	Gevell Selby	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 07 October 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-59 is/are pending in the application.
 4a) Of the above claim(s) 2-17,24-29,31,32,36-47,51 and 56-59 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1 and 52-54 is/are rejected.
 7) Claim(s) 18-23,30,33-35,48-50 and 55 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 24 January 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 2-17, 24-29, 31, 32, 36-47, 51, and 56-59 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/7/05.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the lines of the figures, graphs, and fonts are not uniform width and darkness. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 52 is rejected under 35 U.S.C. 102(b) as being anticipated by Glenn, US 4,667,226.

In regard to claim 52, Glenn, US 4,667,226, discloses a method comprising steps of:

integrating a first charge in a first sensor of a camera (see figure 1, element 140) while a first image light reflects from a first reflection sector of a rotatable structure onto the first sensor (see column 4, lines 51-57; when the shutter is positioned in the path of the light to reflect the light, an image is captured with the first camera (140));

transferring the integrated first charge from the first sensor while the rotatable structure prevents the first image light from impinging on the first sensor (see column 5, lines 41-60; the charge is transferred in the first camera, when no light is reflected to it and instead sent to the second camera);

integrating a second charge in a second sensor of the camera (see figure 1, element 130) while a second image light passes through a first transmission sector of the rotatable structure onto the second sensor (see column 4, lines 51-57; when the shutter is positioned out of the path of the light, an image is captured with the second camera (130); and

transferring the integrated second charge from the second sensor while the rotatable structure prevents the second image light from impinging on the second sensor (see column 5, lines 41-60; the charge is transferred in the second camera, when the light is reflected by the shutter and sent to the first camera).

3. Claims 53 and 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Glenn, US 6,891,568.

In regard to claim 53, Glenn, US 6,891,568, discloses a method comprising steps of:

integrating a first charge in a first sensor of a camera (see figure 5, element 130) while a first image light reflects from a first reflection sector (see figure 6, element 663) of a rotatable structure into the first sensor (see column 4, lines 42-45: when the mirrored portions of the shutter are positioned in the path of the light to reflect the light, an image is captured with the first camera (130));

integrating a second charge in a second sensor (see figure 5, element 120) of the camera while a second image light passes through a first transmission sector (see figure 6, element 661) of the rotatable structure onto the second sensor (see column 4, lines 43-45: when the open section of the shutter is positioned in the path of the light to allow the light to pass through, an image is captured with the second camera (120)); and

transferring the integrated first and second charge from the respective first and second sensors while a first opaque sector (see figure 6, element 662) of the rotatable structure prevents the first and second image light from impinging on at least one of the first and second sensors (see column 4, lines 41-43).

In regard to claim 54, Glenn, US 6,891,568, discloses a method comprising steps of:

integrating a first charge in a first sensor of a camera (see figure 5, element 130) while a first image light reflects from a first rejection sector (see figure 6, element 663) of a rotatable structure, which prevents transmission of a second image light onto a second sensor of the camera (see figure 5, element 120), onto the first sensor (see column 4, lines 42-45: when the mirrored portion (663) of the shutter is positioned in the path of the light to reflect the light, an image is captured with the first camera (130));

transferring the integrated first charge from the first sensor while a first opaque sector (see figure 6, element 662) of the rotatable structure prevents the first image light from impinging on the first sensor (see column 4, lines 41-43); and

integrating a second charge in the second sensor while the second image light passes through a first transmission sector (see figure 6, element 661) of the rotatable structure onto the second sensor (see column 4, lines 43-45: when the open section of the shutter is positioned in the path of the light to allow the light to pass through, an image is captured with the second camera (120));.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glenn, US 6,891,568 in view of Bowers et al., US 5,883,696.

In regard to claim 1, Glenn, US 6,891,568, discloses a camera comprising:

- a first sensor (see figure 5, element 130) disposed to image light that propagates along a reflected axis;
- a second sensor (see figure 5, element 120) disposed to image light that propagates along a direct axis; and
- a rotatable structure (see figure 5, element 660) disposed to define a rotation plane that is oblique to both the reflected axis and the direct axis (see column 4, lines 32-40).

The Glenn reference does not disclose wherein the rotatable structure is one of a first structure and a second structure, wherein the first structure includes a first transmission sector, a first reflection sector disposed adjacent to the first transmission sector, a second transmission sector disposed adjacent to the first reflection sector and a second reflection sector disposed adjacent to the second transmission sector, and wherein the second structure includes a first reflection sector, a first opaque sector disposed adjacent to the first reflection sector, and a first transmission sector disposed adjacent to the first opaque sector.

Bowers et al, US 5,883,696, discloses a camera wherein the rotatable structure includes a bow-tie shaped reflective shutter (20) with a reflective front surface split into two sections by open spaces or transmission sections (see column 2, line 65 to column 3, line 4).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Glenn, US 6,891,568 in view of Bowers et al., US 5,883,696 to have the rotatable structure include a first transmission sector, a first reflection sector disposed adjacent to the first transmission sector, a second transmission sector disposed adjacent to the first reflection sector and a second reflection sector disposed adjacent to the second transmission sector, in order to increase the shorten the exposure time of the sensors and improve the blur for moving objects.

Allowable Subject Matter

3. Claims 18-23, 30, 33-35, 48-50, and 55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,850,277, discloses a camera with an adjustable, rotatable shutter. US 5,764,285, discloses a camera with a rotatable mirror. US 2001/0020696 discloses a camera with a rotatable shutter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

Art Unit: 2615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs



DAVID OMETZ
SUPERVISORY PATENT EXAMINER